CLAIMS

What is claimed:

1. An oscillating motor comprising:

a cylinder which can be filled with a hydraulic medium, said cylinder having an inside wall with at least one rib extending radially inward;

a motor shaft supported in said cylinder with freedom to oscillate;

a sleeve concentric to said motor shaft;

at least one vane extending radially outward to said cylinder;

a pair of cylinder covers surrounding said motor shaft and forming working chambers between said cylinder and said sleeve;

a pair of ring-shaped spaces between said motor shaft and said cylinder;

a pair of pressure-preloaded sealing arrangements in respective said ring-shaped spaces sealing off said working chambers; and

an axial groove between said motor shaft and said sleeve, said axial groove forming a pressure equalization channel connecting said ring-shaped spaces.

2. An oscillating motor as in claim 1 wherein said pressure equalization channel is machined in said motor shaft.

3. An oscillating motor as in claim 1 wherein said pressure equalization channel is formed in said sleeve.

4. An oscillating motor as in claim 1 further comprising a connection which connects said pressure equalization channel to one of said working chambers.

5. An oscillating motor as in claim 4 wherein each said vane comprises a sealing strip which contacts said cylinder, said connection opening against said sealing strip, said sealing strip opening said connection to a working chamber as a function of pressure.

6. An oscillating motor as in claim 3 wherein said motor shaft comprises a pair of circumferential recesses which overlap respective said ring-shaped spaces.

7. An oscillating motor as in claim 1 wherein said sleeve carries said at least one vane.

8. An oscillating motor comprising:

a cylinder which can be filled with a hydraulic medium, said cylinder having an inside wall with at least one rib extending radially inward;

a motor shaft supported in said cylinder with freedom to oscillate;

at least one vane extending radially outward from said shaft to said cylinder;

a pair of cylinder covers surrounding said motor shaft and forming working chambers between said cylinder and said motor shaft;

a pair of ring-shaped spaces between said motor shaft and said cylinder;

a pair of pressure-preloaded sealing arrangements in respective said ring-shaped spaces sealing off said working chambers; and

a first axial groove in each said vane connecting said ring-shaped spaces, said first axial groove receiving a sealing strip which seals off the working chamber.

9. An oscillating motor as in claim 8 further comprising a second axial groove which adjoins said first axial groove at a shoulder in each said vane, said sealing strip being supported on said shoulder.